

CLAIMS

1. A drive motor mounting structure of an electric vehicle, comprising:

5 a drive motor unit having its front part attached to a vehicle body member in a front part of a vehicle by use of a front motor mount; and

a rigid robust member disposed in front of and obliquely above the drive motor unit, and above and in front of the front motor mount.

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2. The drive motor mounting structure according to claim 1, wherein the rigid robust member comprises a casing made of metal.

15 3. The drive motor mounting structure according to claim 2, wherein the rigid robust member comprises an air compressor.

4. The drive motor mounting structure according to claim 1, wherein the rigid robust member is mounted onto the drive motor
20 unit in a state of being vibration isolated.

5. The drive motor mounting structure according to claim 1, wherein a rear part of the drive motor unit is attached to the vehicle body member by use of a rear motor mount disposed above
25 the front motor mount.

6. The drive motor mounting structure according to claim 1, wherein a rear part of the drive motor unit is attached to the vehicle body member by use of a rear motor mount disposed below
30 the front motor mount.

7. The drive motor mounting structure according to claim 5, wherein strength of the front motor mount is set higher than that of the rear motor mount.

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8. The drive motor mounting structure according to claim 6, wherein strength of the front motor mount is set higher than that of the rear motor mount.

10 9. The drive motor mounting structure according to claim 1, wherein the vehicle body member comprises a suspension member having a substantially square-frame-shape in plan view, a rear part of the drive motor unit is attached to the vehicle body member by use of a rear motor mount, and the rear motor mount
15 is attached to a stay extended upward from a rear part of the suspension member.

10. The drive motor mounting structure according to claim 1, wherein the vehicle body member comprises a suspension member
20 having a substantially H shape in plan view, a rear part of the drive motor unit is attached to the vehicle body member by use of a rear motor mount, and the rear motor mount is attached to a stay extended upward from a rear part of the suspension member.

25 11. The drive motor mounting structure according to claim 5, wherein the front motor mounts are provided on left and right sides of a front part of the suspension member to support left and right ends of the front part of the drive motor unit, respectively, and the rear motor mount supports the rear part
30 of the drive motor unit.

12. The drive motor mounting structure according to claim 6,
wherein the front motor mounts are attached to side members
disposed on left and right sides of the suspension member,
5 respectively, both of left and right ends of the front part of
the drive motor unit are supported by the front motor mounts,
and the rear part of the drive motor unit is supported by the
rear motor mount.

10 13. A method for controlling load transmission at a collision
of an electric vehicle, comprising:

attaching a front part of a drive motor unit to a vehicle
body member in a front part of a vehicle by use of a front motor
mount; and

15 disposing a rigid robust member in front of and obliquely
above the drive motor unit and above and in front of the front
motor mount..